

### **REMARKS**

Claims 1-27 are currently pending in this application. Claims 1-6, 13, 15, 17-20, and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai et al. (JP200258772A) in view of Binda (US 2,445,555). Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai et al. in view of Binda. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai et al. in view of Binda, as applied above to (among others) claims 1 and 6, and further view of Tanaka et al. (US 6,535,337 B1). Claims 9-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai et al. in view of Binda, as applied above to (among others) claim 1, and further view of Hawa et al. (US 6,800,378 B2). Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai et al. in view of Binda, as applied above to (among others) claim 1, and further view of VanderPloeg et al. (US 5,895,106).

Independent claims 1, 21, and 22 recite, among other things, an optical stack including an intrinsic polarizer lacking a heat and moisture resistant protective coating and a support layer thereon and an optically functional coating. Independent claim 23 recites, among other things, an optical stack including a K-type polarizer lacking a heat and moisture resistant protective coating and a support layer thereon and an optically functional coating. Independent claim 24 recites a method of forming an optical stack, including providing an intrinsic polarizer lacking a heat and moisture resistant protective coating and a support layer thereon and disposing a first optically functional coating on a first surface of the intrinsic polarizer.

Independent claims 1, 21-24 are patentable over Kumagai et al. and Binda because neither of these references, either alone or in combination, shows or suggests an optical stack having an intrinsic polarizer lacking a heat and moisture resistant protective coating and a

support layer thereon and an optically functional coating.

Kumagai et al. teach a liquid crystal display device with improved viewing angle properties. Since an English language translation of Kumagai et al. was not provided by the Examiner, the Applicants direct their arguments to the portions of Kumagai et al. referenced in the instant Office action.

The Examiner references Figure 5 and element 2A of Kumagai et al. for the proposition that it teaches portions of the claimed invention. In particular, the Examiner alleges that Kumagai et al.'s Figure 5 teaches a polarizer 2A lacking a heat and moisture resistant protective coating and a support layer thereon. Additionally, the Examiner further alleges that the phase-type diffraction layer 1A corresponds to the optically functional coating disposed on the first surface of the polarizer recited in the pending claims.

Applicants disagree with these allegations and submit that the multi-layer optical stack and the associated adhesive layers (see reference numeral 5) depicted in Kumagai et al.'s Figure 5 fail to teach the present invention and actually teach away from the claimed structure and method. Kumagai et al. disclosed two polarizers 2A, 2B. The first polarizer 2A is supported by an adhesive layer 5 and an optical compensation layer 3A, while the second polarizer 2B is supported by layer 6. Since both polarizers are depicted as supported, it is clear that Kumagai et al. do not show or suggest an intrinsic polarizer lacking a support layer thereon.

Furthermore, the use of the adhesive layers 5 adds to the overall thickness of the optical stack, which the present invention avoids. The use of the adhesive layers 5 also results in a layer arrangement in which the phase-type diffraction layer 1A (the alleged optically functional coating) is disposed on the adhesive layer 5 and not on layer 2A (the alleged polarizer layer). Thus, the intervening adhesive layer taught in Kumagai et al. fails to satisfy the recitation of the

present claims wherein a first optically functional coating is disposed on the first surface of the intrinsic polarizer. In addition, Kumagai et al. do not teach or suggest the importance of reducing optical stack thickness by avoiding support and heat resistance layers, or the specific layer arrangement in which the optically functional coating is disposed on the first surface of the intrinsic polarizer. As such, the cited reference fails to teach the present invention.

Binda teaches an intrinsic polarizer in the form of a light-polarizing polyvinyl sheet. However, Binda focuses on the chemical steps used to form the sheet, rather than any specific optical applications. Thus, Binda fails to teach any optically functional coatings, as claimed, or to provide any description relating to supplemental layers suitable for integrating the polyvinyl sheet in an optical stack.

Specifically, Binda makes no reference to an optically functional coating. Certainly, given Binda's April 16, 1945 filing date, it is not surprising that there is no discussion of liquid crystal display (LCD) technology or related component layers, as LCD technology had not yet been developed. Moreover, Binda is silent as to the benefits of including any type of layer, such as those shown in Kumagai et al.'s Figure 5, or using the light-polarizing polyvinyl sheet for any particular application that necessitates integration with other layers or optical elements. Furthermore, Binda does not teach integrating an intrinsic polarizer with any type of optical stack. As such, Binda fails to teach an intrinsic polarizer having a first surface and a first optically functional coating disposed on the first surface of the intrinsic polarizer.

Although the Examiner cites to Binda and Kumagai et al., the cited references fail to disclose a motivation for combining these to obtain the present invention, such as, for example, use in display technology. The references also fail to provide the suggestion to combine these references in order to describe an optically functional coating disposed on an intrinsic polarizer, the

intrinsic polarizer lacking a heat and moisture resistant protective coating and a support layer thereon. Instead, the Examiner simply combines Binda's polarizing sheet and Kumagai et al.'s stack of adhesive bound layers in an attempt to reconstruct Applicants' invention. Applicants submit that the Examiner's combinations represent a classic application of hindsight, and that the prior art contains no suggestion to combine the cited references as applied by the Examiner.

Since no suggestion to combine is apparent from the prior art, Applicant submits that such hindsight is the only explanation for the combination of Binda and Kumagai et al. As succinctly stated by the Federal Circuit, "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fine, 837 F.2d 1071 (Fed. Cir. 1988), 5 USPQ2d 1596. Therefore, there is no suggestion or motivation to combine the Binda and Kumagai et al. references to make the claimed invention, absent the application of hindsight.

Dependent claims 2-20, and 25-27 depend directly or indirectly from independent claims 1, and 21-24, and thus contain all of the limitations of the independent claims from which they depend. Therefore, these dependent claims are patentable over Kumagai et al and Binda, and the other cited references, either alone or in combination, for at least the same reasons set forth above with respect to claims 1 and 21-24.

Enclosed is a Petition for One Month Extension of Time indicating that the extension fee is to be charged to Deposit Account 50-1721.

APPLICANT:  
SERIAL NO.:  
EXAMINER:  
ART UNIT:  
Page 10 of 10

Trapani et al.  
09/897,865  
C. Curtis  
2872

Applicants submit that all of the claims are now in condition for allowance, which action is requested. Please apply any charges or credits to Deposit Account No. 50-1721.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jeffrey L. Snow', written over a horizontal line.

Jeffrey L. Snow  
Reg. No.: 39,037  
Attorney for Applicants  
KIRKPATRICK & LOCKHART, LLP  
75 State Street  
Boston, Massachusetts 02109  
Tel.: (617) 261-3100

DATE: June 3, 2005